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Quantitative study of climatic factors in relation to plant life. (Transactions, Series III, Vol. X, 1916.)

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Ward, R. deC.

The larger relations of climate and crops in the United States. (Quarterly Journal, Jan., 1919.)

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Some considerations on the organization of the agricultural meteorological service. (Bul. Foreign Intelligence, April, 1916. Office of Can. Commis. of Internat. Inst. of Agric.)

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The influence of weather on the yield of wheat. (Vol. XI, Part 4, Oct., 1916.)

ABSTRACTS, REVIEWS, AND NOTES.

Maxwell Hall, 1845-1920.

Meteorologists of the world have read with keen regret the news of the death of Maxwell Hall, in Kingston, Jamaica, on February 20, 1920. Mr. Hall's 75 years of life were spent in England and Jamaica. He was born at Cheltenham, England, in 1845 and educated in private schools and later in King's College, London and Pembroke College, Cambridge, where, in 1871, he was graduated as Wrangler. In 1872 he moved to Jamaica, where he erected a private astronomical observatory and began scientific work. He was appointed Government meteorologist in 1880, a position which he held until his death. While he was of a retiring disposition, this quality did not serve to diminish his prominence in the public life. The death of Mr. Hall came unexpectedly, for, while he had not been enjoying the best of health for some time, his friends had universally held hopes of his early return to health. His cooperation with the United States Weather Bureau in communicating hurricane warnings has been greatly appreciated, and many will remember his efforts to organize and perfect a system of storm-warnings in the West Indies. He has published many articles on hurricanes, earthquakes, and other scientific subjects in the journals of the United States, England and Jamaica.

Dr. J. G. Bartholomew, 1860-1920.

[Abstract from *Nature*, London, Apr. 22, 1920, pp. 238-239.]

Dr. Bartholomew, one of the leading cartographers of the world, died suddenly April 13, 1920, at Cintra, Portugal, at the age of 60. He was a native of Edinburgh, where he received his education in the high school and at the University of Edinburgh. As a young man he entered the business (map publishers) founded by his grandfather. At the age of 29 he succeeded his father as head of this firm, which since 1889 has been known as "The Edinburgh Geographical Institute."

Early in his career he devised the method of representing topographical features by the system known as "layering," which has made the Edinburgh Geographical Institute celebrated throughout the world, and is now copied in all other cartographical establishments. It merely consists of distinctive colors, tints, or shades between successive contours on a contoured map.

In 1899 Dr. Bartholomew published "The Atlas of Meteorology," a work of immense labor with several original features, which shows even more stirring his

zeal for scientific geography, and amply justifies the motto he had adopted, "Amore et labore."

Despite his great cartographical labors he found much time to take active part in numerous scientific societies. In his private life he was held in the highest esteem by all who knew him.—*Geo. G. Chisholm.*

THE PHYSICS OF THE AIR.

With the recent publication in the *Journal of the Franklin Institute* of a paper in two installments on "Factors of Climatic Control," Dr. W. J. Humphreys has completed a series of papers that he has been publishing for more than two years in the journal above mentioned on the general subject of "Physics of the Air." It is expected that this work will soon be issued in book form. No first-rate comprehensive book on meteorology written from the standpoint of the physicist exists at present in any language, and there is perhaps no more striking gap in the literature of science. Dr. Humphreys's book will go a long way toward filling this gap. It is especially remarkable for the amount of skill and labor the author has devoted to checking, verifying—and in many cases discrediting—doctrines and ideas that have heretofore been passed on from one meteorological writer to another without critical examination.—*Scientific American*, New York, June 19, 1920, page 669.

THE APRIL 22 MEETING OF THE AMERICAN METEOROLOGICAL SOCIETY.

The *Bulletin of the American Meteorological Society* for May, 1920, pages 48-55, contains a full account of the papers and discussions presented before the American Meteorological Society which met in Washington, D. C., on April 22, 1920. The sessions, one in the morning and one in the evening, were held at the Central Office of the Weather Bureau. The attendance, 40 to 50, was very good, amounting to the combined attendance at the two previous meetings in St. Louis and New York City.

The morning session was opened by an informal address of welcome by Prof. C. F. Marvin, Chief of the Weather Bureau. Of his address, the *Bulletin* says:

He discussed the opportuneness of the organization of the society at this time, when many outside interests, awakened to the value of meteorology by its applications in the war, were now seeking to apply weather knowledge more thoroughly to peace-time pursuits. The